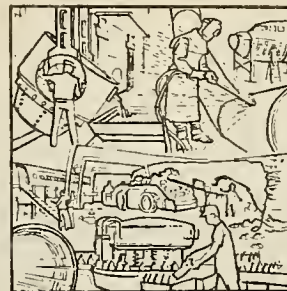


Manufacturers' Shipments, Inventories, and Orders

September 1975



Dale W. Gordon

763-2502

For Wire Transmission 2:00 P.M.

Monday, November 3, 1975

SERIES: M3-1(75)-9

New orders of durable goods industries declined in September 0.8 percent or \$362 million to \$42,326 million, after seasonal adjustment. This decline follows 5 consecutive monthly increases in new orders which began in April. A decline of \$507 million in new orders received by steel mills, along with a \$426 million decline of orders received by the communications equipment industries more than offset increases of \$219 million by the shipbuilding and railroad equipment industries and \$210 million for nonelectrical machinery.

Inventories declined by less than \$100 million in September continuing the trend which began in March. The September decline was considerably less than the average decline of \$902 million reported for the 6 prior months. The total inventories of durable goods industries decreased \$486 million in September while the inventories of nondurable goods industries increased \$400 million. The entire increase in the nondurable goods industries was accounted for by a \$403 million increase reported for the food industries.

Shipments for all manufactured products increased 1.2 percent or \$1,031 million in September. The biggest increase was reported by steel mills whose September shipments increased by \$648 million from their August level. Since steel mill product shipments exceeded new orders received by \$673 million, there

was a comparable decline in the backlog of orders for the steel industry. This decline was the major contributor to the \$1,030 million decline in unfilled orders reported by durable goods producers in September.

The increase in shipments together with the decrease in inventories resulted in a decline in the inventories to shipments ratio to 1.70. This represents the smallest ratio since it reached its recent high of 1.95 in March 1975. The ratio is also at its lowest point since October 1974 when it stood at 1.66.

SCHEDULED RELEASE DATES

The figures on the durable goods industries in this report supersede those issued earlier in the advance report on durable goods. The present report is based on more complete reporting, but the estimates are also considered preliminary. Final figures will appear as historical data in the report to be published for next month. The advance report on durable goods for October is scheduled for release on November 21, 1975 and the full report is scheduled for release on December 3, 1975.

This report contains data on an unadjusted and seasonally adjusted basis. However, the data are not adjusted for price changes. For an explanation of terms used in this report see appendix following table 5.

U.S. DEPARTMENT OF COMMERCE | BUREAU OF THE CENSUS

Inquiries concerning these figures should be addressed to the U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233. For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233 or any Department of Commerce District Office. Price: 15 cents per copy, \$1.50 per year.



Table 1.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, BY INDUSTRY GROUP

(Millions of dollars)

Industry group	Shipments						Total inventories					
	Seasonally adjusted			Without seasonal adjustment ¹			Seasonally adjusted			Without seasonal adjustment ¹		
	Sept. 1975 ^p	Aug. 1975 ^r	July 1975	Sept. 1975 ^p	Aug. 1975 ^r	Sept. 1974	Sept. 1975 ^p	Aug. 1975 ^r	July 1975	Sept. 1975 ^p	Aug. 1975 ^r	Sept. 1974
All manufacturing industries:												
Total.....	86,289	85,258	82,902	89,984	83,692	88,949	146,497	146,583	147,189	145,120	145,976	141,638
Total, excluding transportation.....	76,425	75,221	73,389	79,660	74,944	78,750	125,131	125,467	125,708	123,690	124,821	121,385
Durable goods industries, total.	43,356	42,492	41,227	45,299	40,798	46,329	96,713	97,199	98,189	95,998	97,017	92,512
Stone, clay, and glass products.	2,254	2,203	2,249	2,412	2,355	2,501	3,615	3,661	3,651	3,498	3,608	3,435
Primary metals, total.....	7,061	6,472	5,921	6,921	6,139	8,251	13,790	14,090	14,282	13,624	13,900	10,811
Blast furnaces, steel mills.	3,814	3,166	2,865	3,616	3,011	4,216	7,498	7,761	7,832	7,393	7,606	5,002
Nonferrous metals.....	2,126	2,208	2,057	2,160	2,089	2,853	4,674	4,683	4,774	4,641	4,655	4,182
All other primary metals....	1,121	1,098	999	1,145	1,039	1,182	1,618	1,646	1,676	1,590	1,639	1,627
Fabricated metal products total.....	5,317	5,226	5,184	5,691	5,307	5,652	11,042	11,091	11,285	11,028	11,259	10,690
Metal cans, barrels, and drums.....	615	609	615	696	702	681	791	858	914	780	891	903
Machinery, except electrical, total.....	7,405	7,300	7,285	7,669	6,848	7,612	21,699	21,894	21,984	21,390	21,702	19,959
Engines and turbines.....	605	567	558	659	521	640	1,860	1,875	1,901	1,818	1,849	1,787
Farm machinery and equipment.	744	699	718	791	636	780	1,958	1,986	1,993	1,891	1,954	1,713
Construction, mining, and material handling equipment.	1,539	1,644	1,623	1,598	1,591	1,531	4,989	4,968	4,948	4,884	4,908	3,926
Metalworking machinery....	542	540	524	568	477	553	1,834	1,869	1,825	1,828	1,867	1,727
General industrial machinery	837	739	760	861	734	730	2,056	2,073	2,056	2,023	2,048	1,710
Electrical machinery, total..	5,476	5,472	5,368	5,834	5,339	6,005	13,196	13,325	13,444	13,142	13,349	14,238
Electrical transmission and distribution equipment and industrial apparatus.....	1,097	1,132	1,017	1,143	1,071	1,214	2,884	2,928	2,946	2,859	2,915	3,096
Household appliances.....	846	810	795	887	835	871	1,080	1,098	1,114	1,054	1,075	1,281
Radio and TV.....	467	474	479	584	512	524	994	952	987	1,002	1,005	1,278
Communication equipment....	1,212	1,239	1,285	1,232	1,171	1,217	4,168	4,201	4,205	4,163	4,184	4,063
Transportation equipment, total	9,894	10,037	9,513	10,324	8,748	10,199	21,366	21,116	21,461	21,430	21,155	20,253
Motor vehicles and parts....	6,793	6,765	6,422	7,222	5,613	6,921	5,991	5,915	6,255	6,105	6,092	6,382
Aircraft, missiles, and parts.....	2,038	2,155	1,994	2,021	2,046	2,162	11,924	11,807	11,777	11,900	11,715	10,728
Shipbuilding and railroad equipment.....	535	546	598	546	530	484	2,730	2,717	2,740	2,738	2,689	2,284
Instruments and related products, total.....	1,467	1,438	1,412	1,595	1,443	1,456	3,899	3,947	3,922	3,866	3,973	4,142
Scientific and engineering..	804	750	731	851	743	719	1,949	1,959	1,965	1,932	1,961	2,026
All other instruments and related products.....	663	688	681	744	700	737	1,950	1,988	1,957	1,934	2,012	2,116
All other durable goods industries.....	4,512	4,344	4,295	4,853	4,619	4,653	8,106	8,075	8,140	8,020	8,071	8,984
Nondurable goods industries, total.....	42,933	42,766	41,675	44,685	42,894	42,620	49,784	49,384	49,000	49,122	48,959	49,126
Food and kindred products, total.....	14,051	14,165	13,893	14,846	14,059	14,287	11,395	10,992	10,679	11,291	10,782	11,685
Meat products.....	3,222	3,119	3,086	3,257	3,150	2,772	1,289	1,259	1,213	1,223	1,162	1,162
Fats and oils.....	1,320	1,201	1,162	1,321	1,268	1,300	791	771	702	662	693	819
Tobacco products.....	558	625	607	577	647	583	3,116	3,149	3,121	2,982	2,947	2,609
Textile mill products.....	3,026	2,933	2,894	3,180	2,986	2,941	4,378	4,314	4,243	4,292	4,312	5,031
Paper and allied products, total.....	3,524	3,432	3,382	3,617	3,471	3,577	4,569	4,582	4,489	4,504	4,578	4,288
Pulp, paper, etc.....	1,599	1,550	1,501	1,605	1,571	1,536	1,793	1,791	1,731	1,767	1,789	1,469
Paperboard containers.....	808	797	801	837	802	902	1,154	1,146	1,157	1,152	1,156	1,216
All other paper containers..	1,117	1,085	1,080	1,175	1,098	1,139	1,622	1,645	1,601	1,585	1,633	1,603
Chemicals and allied products, total.....	7,601	7,496	7,232	7,846	7,296	7,556	10,767	10,821	10,683	10,545	10,739	9,255
Industrial chemicals, except pigments.....	2,437	2,375	2,271	2,473	2,351	2,521	2,956	2,964	2,952	2,920	2,932	2,513
Drugs, soap, and toiletries.	2,011	1,981	2,088	2,262	2,072	1,936	3,560	3,659	3,598	3,489	3,692	3,137
Petroleum and coal products...	5,718	5,890	5,477	5,728	5,865	5,056	4,205	4,158	4,144	4,246	4,175	3,962
Rubber and plastics products, n.e.c.....	2,083	2,063	2,070	2,129	2,065	2,124	2,936	2,956	3,022	2,880	2,908	3,080
All other nondurable goods industries.....	6,372	6,162	6,130	6,762	6,505	6,496	8,418	8,412	8,619	8,382	8,518	9,216

See footnotes at end of table.

Table 1.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, BY INDUSTRY GROUP--Continued

(Millions of dollars)

Industry group	New orders						Unfilled orders					
	Seasonally adjusted			Without seasonal adjustment ¹			Seasonally adjusted			Without seasonal adjustment ¹		
	Sept. 1975 ^p	Aug. 1975 ^r	July 1975	Sept. 1975 ^p	Aug. 1975 ^r	Sept. 1974	Sept. 1975 ^p	Aug. 1975 ^r	July 1975	Sept. 1975 ^p	Aug. 1975 ^r	Sept. 1974
All manufacturing industries:												
Total.....	85,501	85,649	83,550	89,034	83,594	89,802	121,157	121,945	121,548	120,188	121,141	138,614
Total, excluding transportation.....	75,477	75,891	73,757	78,546	75,168	79,259	88,757	89,708	89,034	87,566	88,683	103,687
Durable goods industries, total.	42,326	42,688	41,681	44,177	40,585	47,429	116,378	117,408	117,206	115,514	116,635	133,935
Primary metals, total.....	6,275	6,909	6,189	6,103	6,162	8,271	12,106	12,892	12,455	10,927	11,746	17,607
Blast furnaces, steel mills.	3,141	3,648	3,131	3,023	3,102	4,162	6,991	7,664	7,182	5,991	6,584	10,714
Nonferrous metals.....	2,155	2,173	2,057	2,075	2,057	2,849	2,708	2,679	2,714	2,567	2,652	3,502
Fabricated metal products.....	5,178	5,179	5,111	5,604	5,249	6,298	18,066	18,206	18,253	18,128	18,213	20,323
Machinery, except electrical, total.....	7,139	6,929	7,368	7,190	6,544	8,140	26,320	26,485	26,855	25,964	26,439	29,621
Engines and turbines.....	514	573	643	560	551	658	6,849	6,939	6,932	6,834	6,932	6,967
Construction, mining, and material handling equipment.	1,435	1,470	1,649	1,456	1,372	1,689	6,341	6,445	6,618	6,297	6,438	7,197
Metalworking machinery.....	439	519	433	482	465	633	1,792	1,895	1,916	1,823	1,908	2,661
General industrial machinery.	892	666	838	836	744	875	3,610	3,556	3,628	3,524	3,548	3,332
Electrical machinery, total...	5,175	5,809	5,279	5,728	5,732	5,674	19,120	19,422	19,084	19,441	19,547	22,344
Electrical transmission and distribution equipment and industrial apparatus.....	1,035	1,219	1,061	1,019	1,153	1,188	5,793	5,855	5,768	5,751	5,875	6,910
Household appliances.....	846	805	804	883	835	877	142	142	147	142	146	150
Radio and TV.....	448	498	545	578	536	462	417	436	413	456	462	629
Communication equipment.....	1,015	1,441	1,047	1,277	1,413	1,256	7,156	7,353	7,151	7,386	7,341	7,241
Transportation equipment, total.....	10,024	9,758	9,793	10,488	8,426	10,543	32,400	32,237	32,514	32,622	32,458	34,927
Aircraft, missiles, and parts.....	1,905	2,016	2,222	1,805	1,825	2,651	20,529	20,661	20,799	20,801	21,051	20,704
Shipbuilding and railroad equipment.....	754	535	647	860	539	419	8,596	8,376	8,386	8,613	8,299	8,827
All other durable goods industries.....	8,535	8,104	7,941	9,064	8,472	8,503	8,466	8,166	8,045	8,432	8,232	9,113
Nondurable goods industries, total.....	43,175	42,961	41,869	44,857	43,009	42,373	4,779	4,537	4,342	4,674	4,506	4,679
Industries with unfilled orders.....	10,182	9,806	9,740	10,466	9,828	9,714	4,779	4,537	4,342	4,674	4,506	4,679
Industries without unfilled orders.....	32,993	33,155	32,129	34,391	33,181	32,659	-	-	-	-	-	-

Note: The seasonally adjusted data for motor vehicle assembly operations shown very erratic movements during the model changeover period. In order to minimize the effects of these sharp shifts and a somewhat different monthly seasonal pattern during this period, the original seasonal factors obtained for July through September 1975 have been reallocated to yield the same seasonally adjusted results based on trade forecasts for production through September. Actual data reported for September when available will be substituted for the estimate. The original seasonal factors were: July, 72.7; August, 56.6; September, 104.0. These have been reallocated to: July, 75.6; August, 77.8; September, 108.3.

- Represents zero. ^p Preliminary. ^r Revised.

¹ Adjusted for trading-day and calendar-month variations.

Table 2.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, FOR MARKET CATEGORIES AND SUPPLEMENTARY SERIES
(Millions of dollars)

Industry group	Seasonally adjusted			Without seasonal adjustment ¹			Seasonally adjusted			Without seasonal adjustment		
	Sept. 1975 ^D	Aug. 1975 ^T	July 1975	Sept. 1975 ^D	Aug. 1975 ^T	Sept. 1974	Sept. 1975 ^D	Aug. 1975 ^T	July 1975	Sept. 1975 ^D	Aug. 1975 ^T	Sept. 1974
	Shipments						Total inventories					
All manufacturing industries, total..	86,289	85,258	82,902	89,984	83,692	88,949	146,497	146,583	147,189	145,120	145,976	141,638
Durable goods industries, total.....	43,356	42,492	41,227	45,299	40,798	46,329	96,713	97,199	98,189	95,998	97,017	92,512
Nondurable goods industries, total.....	42,933	42,766	41,675	44,685	42,894	42,620	49,784	49,384	49,000	49,122	48,959	49,126
Industry groups arranged by market categories:												
Home goods and apparel.....	7,925	7,623	7,494	8,657	8,307	8,112	12,496	12,421	12,653	12,320	12,473	14,631
Consumer staples.....	16,987	17,193	17,171	18,077	17,152	17,122	19,051	18,803	18,472	18,868	18,519	18,228
Equipment and defense products, except automotive.....	11,081	11,175	11,064	11,411	10,646	11,307	38,739	38,739	38,844	38,350	38,426	35,870
Automotive equipment.....	7,944	7,974	7,586	8,446	6,800	8,222	7,553	7,444	7,824	7,610	7,583	8,221
Construction materials, supplies, and intermediate products.....	6,479	6,311	6,378	6,947	6,685	6,977	12,720	12,776	12,736	12,531	12,753	12,566
Other materials and supplies and intermediate products.....	35,873	34,982	33,209	36,446	34,102	37,209	55,938	56,400	56,660	55,441	56,222	52,122
Supplementary series: ²												
Household durable goods industries.....	3,565	3,431	3,366	3,925	3,627	3,617	6,280	6,280	6,394	6,210	6,327	7,286
Capital goods industries.....	12,447	12,544	12,315	12,830	11,901	13,033	43,229	43,346	43,439	42,911	43,051	40,379
Nondefense.....	10,765	10,812	10,748	11,091	10,183	11,337	35,541	35,771	35,984	35,242	35,539	34,018
Defense.....	1,682	1,732	1,567	1,739	1,718	1,696	7,688	7,575	7,455	7,669	7,512	6,361
	New orders						Unfilled orders					
All manufacturing industries, total..	85,501	85,649	83,550	89,034	83,594	89,802	121,157	121,945	121,548	120,188	121,141	138,614
Durable goods industries, total.....	42,326	42,688	41,681	44,177	40,485	47,429	116,378	117,408	117,206	115,514	116,635	133,935
Nondurable goods industries, total.....	43,175	42,961	41,869	44,857	43,009	42,373	4,779	4,537	4,342	4,674	4,506	4,679
Industry groups arranged by market categories:												
Home goods and apparel.....	7,997	7,648	7,582	8,705	8,329	7,906	2,397	2,316	2,264	2,480	2,415	2,831
Consumer staples.....	16,998	17,220	17,176	18,095	17,175	17,140						
Equipment and defense products, except automotive.....	10,965	11,442	10,976	11,305	10,789	12,342	61,983	62,022	61,881	62,084	62,121	67,742
Automotive equipment.....	8,018	7,845	7,589	8,512	6,690	8,142						
Construction materials, supplies, and intermediate products.....	6,233	6,316	6,233	6,796	6,578	7,526	16,198	16,444	16,439	16,284	16,436	18,190
Other materials and supplies and intermediate products.....	35,290	35,178	33,994	35,621	34,033	36,746	40,579	41,163	40,964	39,340	40,169	49,851
Supplementary series: ²												
Household durable goods industries.....	3,611	3,466	3,440	3,957	3,684	3,430	1,715	1,670	1,635	1,821	1,788	2,226
Capital goods industries.....	12,251	12,440	12,546	12,638	11,752	13,887	70,597	70,791	70,891	70,747	70,934	75,411
Nondefense.....	10,262	10,392	10,728	10,359	9,973	11,906	44,605	45,106	45,523	44,500	45,227	51,178
Defense.....	1,989	2,048	1,818	2,279	1,779	1,981	25,992	25,685	25,368	26,247	25,707	24,233

¹During 1968 manufacturers in ordnance, communications, aircraft and aircraft parts, and shipbuilding industries began to provide aggregate figures on shipments, orders, and total inventories of work performed for the Department of Defense. The results of these reports are included in the defense series. ^PPreliminary. ^TRevised. ²Shipments and new orders adjusted for trading-day and calendar-month variations; unfilled orders and inventories as of end of month. ³The supplementary series are regroupings of the separate industry categories as follows:

Household durable goods industries - Household furniture; kitchen articles and pottery; cutlery, handtools, and hardware; household appliances; ophthalmic goods, watches, and clocks; and miscellaneous personal goods.

Capital goods industries - The capital goods industries series is comparable to the previous Producers' Capital Goods and the Defense Products (old series) categories.

Nondefense products - Machinery, except electrical (excluding farm machinery and equipment and machine shops), electrical machinery (excluding household appliances and electronic components), and the nondefense portions of shipbuilding and repairing and railroad equipment, communication equipment, aircraft and aircraft parts, and ordnance.

Defense products - Based on separate reports on defense work filed by large defense contractors in the following industries: ordnance, communications, aircraft and aircraft parts, and shipbuilding. The data are comparable to those published annually in the MA-175, Shipments of Defense-Oriented Industries, for the specified industries.

Table 3.--MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS MONTH-TO-MONTH AND LONG TERM PERCENT CHANGES

(Based on seasonally adjusted data)

Item and industry group	Month-to-month			Average monthly rates of change				Average, 1969-74	
	Aug.- Sept. 1975	July- Aug. 1975	June- July 1975	3 months			12 months	Average rise	Average decline
				June- Sept. 1975	Mar.- June 1975	Dec. 1974- Mar. 1975	Sept. 1974- Sept. 1975		
Shipments:									
All manufacturing industries.....	+1.2	+2.8	+2.7	+2.2	+1.4	-0.9	+0.1	+1.4	-1.4
Durable goods industries, total.....	+2.0	+3.1	+1.9	+2.3	+1.2	-1.4	-0.2	+1.6	-2.0
Nondurable goods industries, total.....	+0.4	+2.6	+3.5	+2.2	+1.7	-0.5	+0.5	+1.3	-1.0
Total inventories:									
All manufacturing industries.....	-0.1	-0.4	-0.6	-0.4	-0.7	+0.2	+0.2	+0.8	-0.1
New orders:									
All manufacturing industries.....	-0.2	+2.5	+4.1	+2.1	+2.6	-1.0	-0.1	+1.8	-2.0
Durable goods industries, total.....	-0.8	+2.4	+4.9	+2.2	+3.4	-1.8	-0.6	+2.5	-2.8
Nondurable goods industries, total.....	+0.5	+2.6	+3.4	+2.2	+1.8	-0.2	+0.5	+1.3	-1.1
Unfilled orders:									
Durable goods industries, total.....	-0.9	+0.2	+0.4	-0.1	-0.9	-2.6	-1.3	+1.7	-1.1

Table 4.--VALUE OF MANUFACTURERS' INVENTORIES, BY STAGE OF FABRICATION, BY INDUSTRY GROUP

(Millions of dollars)

Industry group	Seasonally adjusted			Without seasonal adjustment			Seasonally adjusted			Without seasonal adjustment		
	Sept. 1975 ^P	Aug. 1975 ^T	July 1975	Sept. 1975 ^P	Aug. 1975 ^T	Sept. 1974	Sept. 1975 ^P	Aug. 1975 ^T	July 1975	Sept. 1975 ^P	Aug. 1975 ^T	Sept. 1974
	Total						Materials and supplies					
All manufacturing industries, total..	146,497	146,583	147,189	145,120	145,976	141,638	50,581	50,756	51,294	50,515	50,914	51,210
Durable goods industries, total.....	96,713	97,199	98,189	95,998	97,017	92,512	31,452	31,626	32,159	31,791	32,076	31,414
Stone, clay, and glass products.....	3,615	3,661	3,651	3,498	3,608	3,435	1,332	1,386	1,415	1,335	1,383	1,337
Primary metals.....	13,790	14,090	14,282	13,624	13,900	10,811	6,243	6,277	6,462	6,383	6,336	5,008
Machinery (electrical and nonelectrical).	34,895	35,219	35,428	34,532	35,051	34,197	10,624	10,683	10,723	10,520	10,724	10,595
Transportation equipment.....	21,366	21,116	21,481	21,430	21,155	20,253	4,694	4,629	4,789	4,813	4,717	4,669
All other durable goods industries.....	23,047	23,113	23,347	22,914	23,303	23,816	8,559	8,651	8,770	8,740	8,916	9,805
Nondurable goods industries, total.....	49,784	49,384	49,000	49,122	48,959	49,126	19,129	19,130	19,135	18,724	18,838	19,796
Chemicals and allied products.....	10,767	10,821	10,683	10,545	10,739	9,255	4,401	4,455	4,425	4,353	4,439	4,129
Petroleum and coal products.....	4,205	4,158	4,144	4,246	4,175	3,962	1,050	985	999	1,030	981	981
Rubber and plastics products, n.e.c.....	2,936	2,956	3,022	2,880	2,908	3,080	997	989	1,016	1,005	1,006	1,245
All other nondurable goods industries....	31,876	31,449	31,151	31,451	31,137	32,829	12,681	12,701	12,695	12,336	12,412	13,441
	Work in process						Finished goods					
All manufacturing industries, total..	49,028	49,232	49,488	48,832	49,063	48,038	46,888	46,595	46,407	45,773	45,999	42,390
Durable goods industries, total.....	41,376	41,692	42,031	41,204	41,520	40,314	23,885	23,881	23,999	23,003	23,421	20,784
Stone, clay, and glass products.....	482	507	510	464	501	437	1,801	1,768	1,726	1,699	1,724	1,661
Primary metals.....	4,287	4,471	4,491	4,170	4,362	3,565	3,260	3,342	3,329	3,071	3,202	2,238
Machinery (electrical and nonelectrical).	14,806	15,080	15,208	14,774	15,043	15,444	9,465	9,456	9,497	9,238	9,284	8,158
Transportation equipment.....	14,724	14,535	14,756	14,727	14,489	13,986	1,948	1,952	1,936	1,890	1,949	1,598
All other durable goods industries.....	7,077	7,099	7,066	7,069	7,125	6,882	7,411	7,363	7,511	7,105	7,262	7,129
Nondurable goods industries, total.....	7,652	7,540	7,457	7,628	7,543	7,724	23,003	22,714	22,408	22,770	22,578	21,606
Chemicals and allied products.....	1,799	1,769	1,755	1,768	1,751	1,428	4,567	4,597	4,503	4,424	4,549	3,698
Petroleum and coal products.....	1,094	1,080	1,056	1,105	1,073	1,034	2,061	2,093	2,089	2,111	2,121	1,947
Rubber and plastics products, n.e.c.....	488	494	497	487	495	527	1,451	1,473	1,509	1,388	1,407	1,308
All other nondurable goods industries....	4,271	4,197	4,149	4,268	4,224	4,735	14,924	14,551	14,307	14,847	14,501	14,653

^PPreliminary.^TRevised.

Table 5.--RATIO OF MANUFACTURERS' INVENTORIES TO SHIPMENTS AND UNFILLED ORDERS TO SHIPMENTS, BY INDUSTRY GROUP

(Based on seasonally adjusted data)

Industry group	Inventories - shipments ratio				Unfilled orders - shipments ratio ¹ (months' backlog)			
	Sept. 1975 ^p	Aug. 1975 ^r	July 1975	Sept. 1974	Sept. 1975 ^p	Aug. 1975 ^r	July 1975	Sept. 1974
All manufacturing industries, total.....	1.70	1.72	1.78	1.67	2.54	2.62	2.69	2.88
Durable goods industries, total.....	2.23	2.29	2.38	2.08	3.08	3.17	3.29	3.46
Stone, clay, and glass products.....	1.60	1.66	1.62	1.52	(NA)	(NA)	(NA)	(NA)
Primary metals.....	1.95	2.18	2.41	1.30	1.71	1.99	2.10	2.33
Fabricated metals.....	2.08	2.10	2.18	2.03	3.84	3.94	3.99	4.33
Machinery, except electrical.....	2.93	3.00	3.02	2.75	3.54	3.63	3.69	4.07
Electrical machinery.....	2.41	2.44	2.50	2.53	3.49	3.55	3.56	3.90
Transportation equipment.....	2.17	2.10	2.26	1.99	6.19	5.96	6.66	6.42
Instruments and related products.....	2.66	2.74	2.78	3.12	(NA)	(NA)	(NA)	(NA)
Nondurable goods industries, total.....	1.16	1.15	1.18	1.22	0.49	0.47	0.45	0.50
Food and kindred products.....	0.81	0.78	0.77	0.88	(X)	(X)	(X)	(X)
Tobacco products.....	5.58	5.04	5.14	4.84	(X)	(X)	(X)	(X)
Textile mill products.....	1.45	1.47	1.47	1.84	(NA)	(NA)	(NA)	(NA)
Paper and allied products.....	1.30	1.34	1.33	1.25	(NA)	(NA)	(NA)	(NA)
Chemicals and allied products.....	1.42	1.44	1.48	1.29	(X)	(X)	(X)	(X)
Petroleum and coal products.....	0.74	0.71	0.76	0.78	(X)	(X)	(X)	(X)
Rubber and plastics products, n.e.c.....	1.41	1.43	1.46	1.51	(X)	(X)	(X)	(X)

(NA) Not available. ^pPreliminary. ^rRevised. (X) Not applicable.¹Excludes the following industries with no unfilled order: Wooden containers; glass containers; metal cans, barrels and drums; motor vehicle assembly operations; foods and related products; tobacco; apparel and related products; chemicals; petroleum and coal products; and rubber and plastics products, n.e.c.

Appendix

The following is a description of the survey and definitions used. These are provided to clarify the meaning of the items involved and do not represent any revisions from those definitions previously employed.

DESCRIPTION OF SURVEY

The Manufacturers' Shipments, Inventories, and Orders survey provides monthly figures that are comparable to the annual totals published each year in the Annual Survey of Manufactures (ASM). The ASM is based on a sample of approximately 60,000 manufacturing establishments drawn from the 5-year census universe of about 310,000 establishments. In the ASM, each manufacturing establishment provides data on employment, payrolls, shipments, cost of materials, capital expenditures, and inventories as well as other selected items. The establishments do not provide information on unfilled orders or new orders. Since the ASM is establishment based, it provides data for each of the 425 manufacturing industries in the Standard Industrial Classification System (SIC) and area data for industry groups.

The monthly survey M3-1 does not provide information at the complete SIC industry detail because of the smaller size of the reporting panel and the fact that most companies cannot provide shipments, inventories, and orders data monthly for individual establishments.

The monthly reporting panel consists of approximately 5,000 reporting units and includes virtually all companies with 1,000 or more employees and a sample of the smaller ones. The reporting unit typically comprises the entire operations of a company although many of the larger diversified companies file separate divisional type reports for their operations in different industries.

Most of the reporting units include mixed industry activity even within the broad industry categories of the monthly survey. The survey methodology assumes that the month-to-month changes of the reporting units classified in each industry category represent effectively the month-to-month movements of the establishments in the SIC industries which make up the category. Thus, the monthly reports are used to update the ASM estimates by using a link relative of matched companies in each industry.

EXPLANATION OF TERMS

Value of Shipments—Shipments in the monthly survey are equivalent to value of shipments as reported

in the ASM which are received or receivable net selling values, f.o.b. plant, after discounts and allowances and excluding freight charges and excise taxes. Included in shipments are the value of all products sold, transferred to other plants of the same company, or shipped on consignment.

Shipments also include receipts of establishments in the industry for contract work performed for others, resales, receipts for miscellaneous activities such as the sale of scrap and refuse; value of installation and repair work performed by employees of the plant; and value of research and development performed at the plant. In the aircraft industry and shipbuilding, the value of work done in a given year varies considerably from the value of shipments because of the long lead time between the input of the materials and labor and the shipments of the completed aircraft or ship. In the annual survey, therefore, the value of work done during the year is requested rather than the value of shipments.

The value of shipments figures developed from the ASM contain duplication at the all manufacturing and industry group levels since the products of some industries are used as materials by other industries within the industry group. With the exception of motor vehicles, it is not significant at the 4-digit SIC group level. Since the M3-1 industry categories typically are groupings of industries, this duplication is significant for the all manufacturing, durable goods and nondurable goods categories and the various market groups. The significance of the duplication within the specific M3-1 industry groups varies depending on the 4-digit industry composition of these groups. It is most pronounced in a few highly integrated industry areas such as primary metals and motor vehicles and parts.

Since most monthly reports are for the entire company or major divisions rather than establishments, the companies are requested to report net sales, i.e., total company billings after discounts and allowances. Companies which file divisional reports are requested to treat transfers from one division of the company to another as if they were net sales to outside customers. Although this definition of shipments in the monthly reports differs from that used in the annual establishment reports, it is assumed that the month-to-month changes in company sales in the industry are representative of the month-to-month shipments of the establishments in the industry.

Inventories—End-of-month inventories in the monthly survey are identical in definition to the end-of-year inventories in the ASM. In the ASM, respondents are asked to report inventories of individual establishments at approximate current cost if



feasible; otherwise, "at book values." Since different methods of inventory valuation are used (LIFO, FIFO, etc.), the definition of the aggregate inventories for establishments in an industry is not precise. The figures on the change in inventories from one period to the next are of greater significance than the actual aggregates.

Inventories are reported by stage of fabrication: (a) finished goods; (b) work in process; and (c) materials, supplies, fuel, and other inventories. In using inventories by stage of fabrication at the all manufacturing and 2-digit industry levels as well as for the durable and nondurable goods sectors, it should be noted that a finished product of one industry may be a raw material for another industry at the next stage of fabrication. Insofar as the durable and nondurable goods sectors and also the 2-digit industry groups contain industries with successive stages of processing, the same type of commodity may be included under different inventory categories in the aggregate statistics.

New Orders Received and Unfilled Orders—Orders as reported in the monthly survey are net of cancellations during the month. They include orders received during the period and also filled during the period as well as those orders received for future delivery. They

also include the net sales value of contract change documents which increase or decrease the sales value of the unfilled orders to which they relate. Orders include only those supported by binding legal documents such as signed contracts, or letter contracts. In case of letter contracts the full amount of the sales value is included if the parties are in substantial agreement on the amount; otherwise, only the funds specifically authorized to be expended are included. The respondent is instructed to deduct the sales value of partial or complete cancellation of existing orders.

Unfilled orders include orders as defined above that have not yet passed through the sales account. Generally, unfilled orders at the end of the reporting period are equal to unfilled orders at the beginning of the period plus net new orders received less net sales.

While both new orders and unfilled orders are used in reviewing individual company reports for consistency, only unfilled orders are estimated directly in the tabulated totals. New orders are derived from the shipments plus net change in unfilled orders for each industry category. This procedure is followed for seasonally adjusted data as well as for the unadjusted data. Shipments and unfilled orders are seasonally adjusted independently. Seasonally adjusted new orders are derived from seasonally adjusted shipments and seasonally adjusted unfilled orders.

